

REMARKS

Reconsideration of the above-identified patent application in view of the present amendment and the following remarks is respectfully requested.

This amendment amends the specification to correct typographical errors on pages 4 and 22. This amendment also amends claims 1-4, 6, 7, 10, 12, 14, 16, and 17 and adds new claim 20.

Claim 1, as amended, patentably defines over Ryan, U.S. Patent Application Publ. No. 2004/0046376. Schenck et al., U.S. Patent No. 6,076,854, and Amamori, U.S. Patent No. 6,502,858, whether considered singularly or in combination. Claim 1, as amended, recites an inflation fluid source having a first mode of operation which provides inflation fluid to increase an inflation fluid pressure in an inflatable vehicle occupant protection device to a first inflation fluid pressure. In a second mode of operation, the inflation fluid source provides inflation fluid to increase the inflation fluid pressure in the inflatable vehicle occupant protection device to a second inflation fluid pressure that is higher than the first inflation fluid pressure. Claim 1 also recites a tether that remains intact in response to the first inflation fluid pressure in the inflatable vehicle occupant protection device. The tether also remains intact as the inflation pressure increases above the first inflation fluid pressure toward the second inflation fluid pressure. The tether releases in response to the inflation fluid pressure in

the inflatable vehicle occupant protection device reaching the second inflation fluid pressure.

None of the Ryan, Schenck et al., and Amamori teaches or suggests the tether of claim 1. Specifically, none of Ryan, Schenck et al., and Amamori teaches or suggests a tether that is released in response to the inflation fluid pressure in the inflatable vehicle occupant protection device reaching the second inflation fluid pressure as a result of a second mode of operation of an inflation fluid source, as is set forth in claim 1.

In Ryan, actuation of initiator 69 activates the primary gas generator 72 causing a volume of gas to be provided into the air bag cushion 20. (Ryan, paragraph 0035). The volume of gas provided by the activation of the primary gas generator 72 results in a first pressure in the air bag cushion 20. Ryan teaches that the tether 30 may remain anchored or may be released while the pressure in the air bag cushion 20 remains at the first pressure.

Specifically, Ryan teaches that when the secondary gas generator 75 remains unactuated, the tether 30 remains anchored at support pins 58. (Ryan, paragraph 0036). Ryan further teaches that the tether 30 is released when actuation of the first and second gas generators 72 and 75 cause a rupturing of a second burst disk 78 of the inflator 40 and the gas passing through the ruptured second burst disk moves a plug element 42 to release the tether 30 from a carrier element 44. (Ryan, paragraphs 0038-0039). Ryan also teaches that "[a]s the plug element 42 is displaced, gas transmission

openings 63 are opened thereby directing the driving gas outwardly and into the air bag cushion. (Ryan, paragraph 0039). Thus, Ryan specifically discloses that the tether 30 is released by the movement of the plug element 42 prior to the gas resulting from actuation of the second gas generator 75 reaching the air bag cushion. Therefore, Ryan fails to teach or suggest a tether that is released in response to the inflation fluid pressure in the inflatable vehicle occupant protection device reaching the second inflation fluid pressure as a result of a second mode of operation of an inflation fluid source. Since Ryan fails to teach or suggest this feature of claim 1, claim 1 patentably defines over Ryan.

Schenck et al. also fails to teach or suggest this feature of claim 1. In Schenck et al., tethers 22, 24, 26, and 28 are released in response to hot discharge gases of a secondary inflator 34 melting heat-sensitive links 36. (Schenck et al., Col. 2, lines 48-52). Schenck et al. also discloses an embodiment in which downward movement of a plate 44 releases tethers. (Schenck et al., Col. 2, line 58-Col. 3, line 22). Schenck et al. fails to teach or suggest a tether that is released in response to the inflation fluid pressure in the inflatable vehicle occupant protection device reaching the second inflation fluid pressure as a result of a second mode of operation of an inflation fluid source. Since Schenck et al fails to teach or suggest this feature of claim 1, claim 1 patentably defines over Schenck et al.

Amamori also fails to teach or suggest this feature of claim 1. Amamori discloses straps 8 having tearable portions

8e that tear when an inner pressure within an air bag exceeds a predetermined pressure. (Amamori, Col. 4, lines 39-48). Amamori, however, fails to teach or suggest a tether that remains intact in response to a first mode of operation of an inflation fluid source and releases in response to a second inflation fluid pressure resulting from a second mode of operation of the inflation fluid source. Amamori has no teaching or suggestion of an inflator having two modes of operation, with the tether remaining intact in response to a first mode of operation of the inflator and the tether releasing in response to a second mode of operation of the inflator. Amamori suggests that the tearable portions 8e of the straps 8 tear during all inflator actuations and prior to occupant contact with the air bag. (Amamori, Col. 5, lines 33-58; and col. 6, lines 31-55). Therefore, Amamori also fails to teach or suggest this feature of claim 1. Thus, claim 1 patentably defines over Amamori.

Since none of Ryan, Schenck et al., and Amamori teaches or suggests a tether that is released in response to the inflation fluid pressure in the inflatable vehicle occupant protection device reaching the second inflation fluid pressure as a result of a second mode of operation of an inflation fluid source, a combination of the references also fails to teach or suggest this feature.

Moreover, there is no suggestion or motivation to combine the reference teachings of Ryan, Schenck et al., and Amamori to meet the claim limitations of claim 1. Since Ryan releases the tether in response to inflation fluid moving a plug

element 42, Schenck et al. releases tethers by either melting portions of the tethers or moving an anchor plate, and Amamori tears the straps 8 in response to all actuations of the inflator, one of ordinary skill in the art would find no teaching or motivation for combining the references to meet the claim limitations of claim 1 in which the tether remains intact until the inflation fluid pressure in the inflatable vehicle occupant protection device reaching the second inflation fluid pressure as a result of a second mode of operation of an inflation fluid source. Therefore, claim 1 patentably defines over any combination of Ryan, Schenck et al., and Amamori. Allowance of claim 1 is respectfully requested.

Claims 2-19 depend from claim 1 and are allowable for at least the same reasons as claim 1. Additionally, claims 2-19 are allowable for the specific limitations of each claim.

Specifically, claim 14 recites that the tether includes at least one tear stitch which tears in response to the second inflation fluid pressure in the inflatable vehicle occupant protection device. Claim 14 further recites that the tear stitch extends across a width of the tether. The tethers disclosed in Ryan and Schenck et al. do not include tear stitches that tear. Amamori teaches that the straps 8 include tearable portions 8e. Amamori, however, specifically teaches that the straps 8 may only be torn in a lengthwise direction. (Amamori, Col. 1, lines 48-53; and Col. 4, lines 49-52). Therefore, none of Ryan, Schenck et al., and Amamori teaches

or suggests the features of claim 14. Thus, allowance of claim 14 is respectfully requested.

Claim 16 recites that the tear stitch is formed by a thread that secures together longitudinally spaced portions of the tether. None of Ryan, Schenck et al., and Amamori teaches or suggests the features of claim 16. Thus, allowance of claim 16 is respectfully requested.

Claim 17 recites a tear strap having a portion with a narrowed width that is adapted to remain intact when the first inflation fluid pressure is provided to the inflatable vehicle occupant protection device and is adapted to tear when the second inflation fluid pressure is provided to the inflatable vehicle occupant protection device. None of Ryan, Schenck et al., and Amamori teaches or suggests the features of claim 17. Thus, allowance of claim 17 is respectfully requested.

New claim 20 is similar to claim 1 and further recites that the inflation fluid source includes separate first and second combustion chambers. The first and second combustion chambers include material that is ignitable to generate inflation fluid. A first igniter is associated with the first combustion chamber and is actuatable for igniting the material of the first combustion chamber. A second igniter is associated with the second combustion chamber and is actuatable for igniting the material of the second combustion chamber.

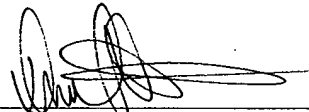
Claim 20 is allowable for reasons similar to those set forth above with regard to claim 1. Additionally, none of Ryan, Schenck et al., and Amamori teaches or suggests the

features of the inflator of claim 20. Thus, allowance of claim 20 is respectfully requested.

In view of the foregoing, it is respectfully submitted that the above-identified patent application is in condition for allowance, and allowance of the above-identified patent application is respectfully requested.

Please charge any deficiency or credit any overpayment in the fees for this amendment to our Deposit Account No. 20-0090.

Respectfully submitted,



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